

December 1, 1952

Dr. L. Dienes
Bacteriology Dept.
Massachusetts General Hospital
Boston, Mass.

Dear Dr. Dienes:

I was about to write to you a few days ago with discouraging news. However, just during the past couple of days, one of the broth tubes that I had inoculated with the sample of Proteus L that you had given me finally decided to grow out, in the characteristic surface film. I had been afraid that the vibration of the airplane had so emulsified the vial of L-growth that I would not achieve a successful transfer, but this is very encouraging.

from Proteus 52

Meanwhile, also, I have obtained L-type growth in penicillin-nutrient-agar (without horse serum) and have made one transfer to the same medium, using a massive agar inoculum. No bacterial forms are evident, and I am now trying to propagate this in broth. I am therefore hopeful that I may eventually learn how to handle these queer beasts. Unless we are very lucky, however, I doubt that there is much we can do by way of genetic experiments with Proteus. Have you managed to re-isolate L-type from your Salmonella strain, and have you decided how it may be possible for you to send this?

Under separate cover, I am sending W-1637, which is the same as "E. coli 204" described by Klieneberger. Actually, it looks more like Aerobacter than coli. Microscopically it appears to consist primarily of vesicles, but I have not noticed any prominent granular phase. I will be perfectly happy to send you our Salmonella assay strain, SW-435, but will remind you that this is now quite far removed from its original isolation. Actually, for the genetic experiments I discussed with you, it is preferable to obtain the L-type growth from a wild-type Salmonella, and to experiment on combinations of this with the mutant bacterial forms.

Let me take this occasion to thank you for your gracious hospitality during my very profitable visit.

Yours sincerely,

Joshua Lederberg

P.S. It's just as well I got to the airport early the day I left. New York was closed by fog, but I found another flight direct to Chicago.

JL